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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/562,264

04/27/2006

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EXAMINER

WEBER, JONATHAN C

ART UNIT

PAPER NUMBER

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MAIL DATE

DELIVERY MODE

12/16/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/562,264	Applicant(s) JOUBERT, FRANCOIS ALWYN	
	Examiner Jonathan C. Weber	Art Unit 3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5,8,13-18 and 24-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13 is/are allowed.
- 6) ☒ Claim(s) 1,5,8,14,18 and 25 is/are rejected.
- 7) ☒ Claim(s) 15-17,24 and 26-28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 September 2009 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Pursuant to the response filed on 16 September 2009, the amendment to the claims, drawings, and specification have been entered into the instant application. The previously noted objections to the drawings and specification have been overcome by the amendment and are hereby withdrawn. No additional claims have been cancelled, no claims have been added, and claims 1, 5, 8, 13-18, & 24-28 are pending in the instant application.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the **“retaining means”** must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

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of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the sixth paragraph of 35 U.S.C. 112:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

1. **Claim element "retaining means", as in claims 5, 14 and 25**, is a means (or step) plus function limitation that invokes 35 U.S.C. 112, sixth paragraph. However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function. The applicant has not disclosed how the "first chain-retaining device" travels from its first position to its second position, so it is unclear what type of structure would be used to prevent the "first chain-retaining device" from moving. Further, the drawings have not shown the devices and their interactions clearly enough to allow one skilled in the art to make and/or use the claimed invention without undue experimentation.

Applicant is required to:

(a) Amend the claim so that the claim limitation will no longer be a means (or step) plus function limitation under 35 U.S.C. 112, sixth paragraph; or

(b) Amend the written description of the specification such that it expressly recites what structure, material, or acts perform the claimed function without introducing any new matter (35 U.S.C. 132(a)).

If applicant is of the opinion that the written description of the specification already implicitly or inherently discloses the corresponding structure, material, or acts so that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function, applicant is required to clarify the record by either:

(a) Amending the written description of the specification such that it expressly recites the corresponding structure, material, or acts for performing the claimed function and clearly links or associates the structure, material, or acts to the claimed function, without introducing any new matter (35 U.S.C. 132(a)); or

(b) Stating on the record what the corresponding structure, material, or acts, which are implicitly or inherently set forth in the written description of the specification, perform the claimed function. For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

2. **Claims 1 and 18** are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,481,862 issued to Wiethoff et al (Wiethoff).

Regarding claim 1, Wiethoff discloses an ammunition loading assembly for loading a projectile into a barrel of a gun (See Figures 13-15 and Title), comprising: an urging member (233, Figure 13) for urging the projectile into the barrel (See Figure 13, Element 28 is the breech end of the barrel, element 233 moves from the first location outlined in solid form to the second location adjacent the firearm barrel shown in dashed

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form); and drive means (244/246/247/248/249/250/251/236, Figure 13) for driving the urging member between a projectile receiving position outside the barrel and a projectile delivery position inside a chamber of the gun, proximate to the end of the barrel (Col. 14 Lines 15-47), so that the projectile is delivered into the proximate end of the barrel where the urging member stops (In view of Figure 13, element 233 shown with dashed lines) and the projectile is released by the urging member (Col. 13 Lines 38-53) so that the projectile engraves on rifling in the barrel under its own momentum (Understood that once the projectile is released after full forward movement is accomplished, the projectile would move under its own momentum so that the breech can be properly closed for firing to commence), the drive means including a drive chain assembly connected to the urging member for driving the urging member between the projectile receiving and delivery positions (236, Figure 13).

Regarding claim 18, Wiethoff discloses a gun including an ammunition loading assembly according to claim 1 (See Figure 1).

3. **Claims 1 and 18** are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,727,790 issued to DeHaven et al (DeHaven).

Regarding claim 1, DeHaven discloses an ammunition loading assembly for loading a projectile into a barrel of a gun (See Title and all Figures), comprising: an urging member (120, Figure 5a) for urging the projectile into the barrel (Understood to be the purpose of a rammer); and drive means (256/258/262/266, Col. 12 Lines 45-56) for driving the urging member between a projectile receiving position outside the barrel and a projectile delivery position inside a chamber of the gun, proximate to the end of

the barrel (Col. 12 Lines 54-56), so that the projectile is delivered into the proximate end of the barrel where the urging member stops (See Figure 9h) and the projectile is released by the urging member (In view of Figures 9g and 9h) so that the projectile engraves on rifling in the barrel under it's own momentum (Col. 2 Lines 43-63, Col. 7 Lines 30-64, and Col. 20 Line 62-Col. 21 Line 4), the drive means including a drive chain assembly connected to the urging member for driving the urging member between the projectile receiving and delivery positions (256/258/262/266).

Regarding claim 18, DeHaven discloses a gun including an ammunition loading assembly according to claim 1 (See Figure 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 4,481,862 issued to Wiethoff et al (Wiethoff) in view of U.S. Patent 889,321 issued to Meigs et al (Meigs).

Regarding claim 8, Wiethoff discloses the ammunition loading assembly according to claim 1 and the use of a drive chain assembly constituted of a plurality of chain links pivotally connected to each other.

Meigs discloses wherein the drive chain assembly is constituted of a plurality of chain links pivotally connected to each other (16, Figure 1); and wherein each chain link

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is provided with a retaining block (14, Figure 1), each retaining block comprising a base for connecting to a chain link (14, connects to links 16, Figures 1 & 2) and two abutment faces extending upwardly from the base (17, Figure 2), the angle between the base and each abutment face being marginally greater than 90 degrees (The angle between the base and each abutment face appears to be greater than 90 degrees), so that each retaining block abuts the retaining block of a consecutive chain link to make the drive chain assembly rigid in all directions but one (14, Figure 1, when two links abut, the chain is rigidised in all directions save one, Col. 2 Lines 64-66), such that when the drive chain assembly is bent in the one direction, the retaining blocks are displaced from each other (In view of Figure 2, Links 16 are shown with retaining blocks 14 which spread apart when the chain is bent about the sprocket wheel 18), and when the drive chain assembly is in a linear configuration, adjacent retaining blocks abut each other to limit bending of the drive chain assembly in all but said one direction (In view of Figure 2, adjacent retaining blocks 14 abut each other and limit bending), the retaining blocks being configured so that, when the blocks abut each other, the drive chain assembly extends in a loose curve, and when the curve is straightened the drive chain assembly is stressed (In view of Figure 2, it is understood that the drive chain assembly is stressed by straightening the curve).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Wiethoff to utilize a drive chain assembly and rammer to load projectiles into the breech of a firearm where momentum is used to complete the loading process with the teachings of Meigs to use a rigid chain

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assembly to obviate the need for a support track to hold the chain assembly. The suggestion/motivation for doing so would have been to provide a rigid chain so that a chain path or guide would not be required.

Allowable Subject Matter

5. **Claims 15-17, 24, and 26-28** are objected to as being dependent upon a rejected base claim.
6. **Claim 13** is allowed.

Response to Arguments

7. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection necessitated by amendment.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan C. Weber whose telephone number is (571)270-5377. The examiner can normally be reached on Monday-Friday 7:30AM-4:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on (571)272-6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael J. Carone/
Supervisory Patent Examiner, Art Unit 3641

/J. C. W./
Examiner, Art Unit 3641